City of Poquoson

Stormwater Pollution Prevention Plan

Public Works/Utilities/ Fleet Maintenance Facility

12 Municipal Drive
Poquoson, VA 23662

June 2017

Submitted By

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Stormwater Pollution Prevention Plan

for:

City of Poquoson, Public Works/Utilities/Fleet Maintenance Facility

12 Municipal Drive
Poquoson, VA 23662
(757) 868-3590

SWPPP Contact(s):

Facility Supervisor:
Jerry Cagle
12 Municipal Drive
Poquoson, VA 23662
(757) 868-3590
Jerry.cagle@poquoson-va.gov

SWPPP Preparation Date:

06/30/2017
MS4 Permit Number: VAR040024

AECOM

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INTRODUCTION

I. Purpose

The City of Poquoson's current Municipal Separate Storm Sewer System (MS4) permit was issued by the Virginia Department of Environmental Quality (DEQ) under the purview of the United States Environmental Protection Agency (EPA), and became effective on July 1, 2013. Under the terms and conditions of the permit, the City was required to identify all municipal "high-priority facilities" that have a high potential for discharging pollutants, and are not covered under a separate Virginia Pollutant Discharge Elimination System (VPDES) permit. For those facilities identified as high-priority facilities, the permit requires the development and implementation of facility specific stormwater pollution prevention plans (SWPPP). These facility SWPPPs identify potential sources of pollutants that can affect stormwater discharges, describe the practices that will be implemented to prevent or control the release of pollutants in stormwater discharges, and are designed to help minimize or prevent pollutant discharge from daily operations such as equipment and fleet maintenance, storage, transport, application and disposal of fuels, chemicals, waste fluids, construction material and roadway maintenance materials. The City of Poquoson identified its Public Works/Utilities/Fleet Maintenance Facility as its only high-priority facility.

A link to the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems is available on DEQ's website at:
http://www.deq.virginia.gov/Programs/Water/StormwaterManagement/VSMPPermits/MS4Permits.aspx

II. SWPPP Content

This SWPPP includes the following:

a. Activities at the Facility and a site description that includes a site map identifying all outfalls, direction of flows, existing source controls, and receiving water bodies;
b. Stormwater pollution prevention team;
c. Summary of potential pollutant sources;
d. Description of erosion control measures;
e. A description of the applicable training as required;
f. Schedules and procedures; and
g. Signature requirements

The contents of this SWPPP will be evaluated and modified as necessary to accurately reflect any discharge, release, or spill from the facility.

A copy of this SWPPP will be kept at each facility and will be updated as needed, and will be used as part of facility staff training.

SECTION 1: FACILITY DESCRIPTION AND CONTACT INFORMATION.

1.1 Facility Information.

Facility Information

Name of Facility: City of Poquoson, Public Works/Utilities/Fleet Maintenance Facility

Street: 12 Municipal Drive, Poquoson, VA 23662

City: Poquoson State: VA ZIP Code: 23662

Latitude/Longitude

Latitude: 37. 1306º N (decimal degrees)

Longitude: 76.3764 º W (decimal degrees)

Method for determining latitude/longitude (check one):

☐USGS topographic map (specify scale:_____) ☒GPS

☐Other (please specify): _____

Horizontal Reference Datum (check one):

☐NAD 27 ☒NAD 83 ☒WGS 84

Is the facility located in Indian country? ☐Yes ☒No

If yes, name of Reservation, or if not part of a Reservation, indicate "not applicable."_____

Are you considered a "federal operator" of the facility?

Federal Operator – an entity that meets the definition of "operator" in this permit and is either any department, agency or instrumentality of the executive, legislative and judicial branches of the Federal government of the United States, or another entity, such as a private contractor, operating for any such department, agency, or instrumentality.

☐Yes ☒No

Estimated area of industrial activity at site exposed to stormwater: 3.09 (acres)

Discharge Information

Does this facility discharge stormwater into a municipal separate storm sewer system (MS4)?

☒Yes ☐No

If yes, name of MS4 operator: The City of Poquoson Public Works

Name(s) of surface water(s) that receive stormwater from your facility: Cedar Creek, Floyds Bay

Does this facility discharge industrial stormwater directly into any segment of "impaired water" (see definition in 2015 MSGP, Appendix A)? ☐Yes ☒No

There are no direct discharges of stormwater from the facility to impaired waters. Stormwater from the facility drains to non-tidal perimeter ditches leading to Cedar Creek, and to non-tidal roadside ditches that ultimately drain to Floyds Bay. Both Cedar Creek and Floyds Bay are tidal waters and are considered impaired waters due to fecal coliform. [Cedar Creek (VAT-C07E_CCR01A06)(CO7E-17-SF); Floyds Bay (VAT-C07E_CCR01A06)(CO7E-17-SF)]

If Yes, identify name of the impaired water(s) (and segment(s), if applicable): NA

Which of the identified pollutants may be present in industrial stormwater discharges from this facility?

NONE

Has a Total Maximum Daily Load (TMDL) been completed for any of the identified pollutants? If yes, please list the TMDL pollutants: NA

Does this facility discharge industrial stormwater into a receiving water designated as a Tier 2, Tier 2.5 or Tier 3 water (see definitions in 2015 MSGP, Appendix A)? ☐Yes ☒No

Are any of your stormwater discharges subject to effluent limitation guidelines (ELGs) (2015 MSGP Table 1-1)? ☐Yes ☒No

If Yes, which guidelines apply?

1.2 Contact Information/Responsible Parties.

Facility Operator(s):

Name: H. Thomas Jones
Address: 12 Municipal Drive
City, State, Zip Code: Poquoson, VA 23662
Telephone Number: (757) 868-3590
Email address: thomas.jones@poquoson-va.gov
Fax number: (757) 868-3515

Facility Owner(s):

Name: City of Poquoson
Address: 500 City Hall Avenue
City, State, Zip Code: Poquoson, VA 23662
Telephone Number: (757) 868-3000
Email address: randy.wheeler@poquoson-va.gov
Fax number: (757) 868-3101

SWPPP Contact(s):

SWPPP Contact Name (Primary): Jerry Cagle
Telephone number: (757) 868-3590
Email address: jerry.cagle@poquoson-va.gov
Fax number: (757) 868-3515

1.3 Stormwater Pollution Prevention Team.

Table 1.1: Stormwater Pollution Prevention Team

Staff Names	Individual Responsibilities
H. Thomas Jones	Director of Public Works
Bob Speechley	Utilities Superintendent
Jon Ellis	Fleet Maintenance Supervisor
Jerry Cagle	Facility Supervisor

1.4 Site Description.

The Public Works/Utilities/Fleet Maintenance Facility is a centralized facility that maintains city vehicles and consolidates operations for Public Works, Public Utilities, and Fleet Maintenance. The facility contains administrative buildings, a public works storage building, fleet maintenance garages, a vehicle wash bay, a salt/sand shed, fuel/oil storage tanks, a fueling area, and indoor and outdoor storage for construction and maintenance related tools and materials. Activities at the site are generally related to fleet maintenance, equipment repair, and fuel and chemical storage and disbursement.

Activities at the Facility include:

- Street Sweeper Storage and Maintenance
- Landscaping Equipment Storage and Maintenance
- Fleet Vehicle Maintenance and Washing
- Heavy Equipment Maintenance and Washing
- Public Works Infrastructure Maintenance
- Outdoor Material Loading and Unloading
- Fuel/Heating Oil Disbursement
- Sanding and Painting*
- Welding and Metal Fabrication*

*As part of routine maintenance, fleet maintenance activity can include incidental equipment and/or vehicle sanding, painting, welding and metal fabrication. Larger or more complex maintenance activities of this nature are performed by off-site contractors. Minimal quantities of materials and chemicals for these activities are stored on-site.

The facility site is relatively flat. Stormwater from approximately 1.48 acres, or 48 percent of the facility area, runs off as sheet flow to one of three perimeter ditches located to the north, west, and south of the facility. The perimeter ditches are part of a larger ditch system that drains south to Cedar Creek. Overland flow to the perimeter ditches occurs primarily from the areas bordering the facility fence on northern, western and southern edges of the facility property.

A small pipe system drains the majority of the remaining site area. Approximately 1.34 acres, or 43 percent of the site, drains to a pipe system that discharges into a grassed roadside ditch just east of the facility which eventually drains to Floyds Bay. Overland flow from approximately .11 acres in the northeast corner

drains to a shallow paved swale on Municipal Drive and flows north to a road culvert and a ditch leading to Floyds Bay. The remaining .16 acres of the facility located in the southeast corner drains to a small system of roadside ditches and pipes before discharging into the southern perimeter ditch through an 18" pipe. The facility drainage map can be found in Attachment C.

1.5 General Location Map.

The general location map for this facility is included as Attachment A (provided at the end of this document).

1.6 Site Maps.

The facility site map is included as Attachment B. A separate drainage map for the facility is included as Attachment C.

SECTION 2: POTENTIAL POLLUTANT SOURCES.

2.1 Potential Pollutants Associated with Industrial Activity.

Table 2.1: Potential Pollutant Sources

Industrial Activity	Associated Pollutants
Fueling/Refueling	Fuel
Vehicle/Equipment Maintenance	Oil, Grease, Battery Acid, Vehicle Fluids, Cleaners, Cleaning Solvents, Hand Sanitizers, Paint hardener, Rust Proofers
Baseball Field Maintenance	Detergents, Air Fresheners, Bleach, Odor Neutralizers
Building Maintenance	Paint, Detergents, Air Fresheners, Bleach, Odor Neutralizers
General Maintenance	Insect Repellant, Insect Killer, Hydraulic Cement Compound, Propane
General and Roadway Maintenance	Adhesives, Sealants, De-Icers and Ice Melt Additives, Sand/Salt Mixture, Cold Patch Asphalt Mix, Sand
Good Housekeeping	Sweeping Compound, Crumb Rubber
Landscaping	Fertilizers, Soil Amendments, Adulticides, Larvicide, Herbicides, Insecticides

2.2 *Spills and Leaks.*

Table 2.2: Areas of Site Where Potential Spills/Leaks Could Occur

Location	Discharge Points
Fueling Station	Outfall B
Fleet Maintenance Garage	Outfall B
Public Works Storage	Outfall B
Chemical Storage	Outfall B
Vehicle Washing Area	Outfall B
Vehicle Storage Area	South Perimeter Ditch
Waste Oil Tank Storage Shed	Outfall C
Above Ground Diesel/Gasoline Storage Tank	Outfall B
Above Ground Heating Oil Storage Tank	Outfall B
Sand/Salt Storage Shed	West Perimeter Ditch
Used Battery Storage Area	South Perimeter Ditch
Used Tire Storage Area	South Perimeter Ditch

2.3 *Unauthorized Non-stormwater Discharges Documentation.*

No unauthorized non-stormwater discharges have been observed at the facility at this time.

2.4 *Salt Storage.*

A salt/sand mixture is stored under cover inside a divided wood and vinyl structure. The structure is approximately fifty feet in length, thirty feet in width and fifteen feet in height.

2.5 *Sampling Data Summary.*

No stormwater sampling was conducted for this site.

SECTION 3: STORMWATER CONTROL MEASURES AND PROCEDURES.

3.1 *Non-numeric Technology-based Effluent Limits (BPT/BAT/BCT)*

3.1.1 *Minimize Exposure.*

The salt/sand mixture pile is kept in a divided wood and vinyl covered structure. The front and back of the salt/sand structure is open. To avoid exposure of the mixture pile to precipitation, the edge of the pile is kept approximately three feet behind the drip line of the eave. A check dam (berm) consisting of #10 fines gravel is maintained across the bottom front of the pile in order to mitigate material migration into the general yard.

Figure 1. Salt/Sand Mixture Storage

Figure 2. Sand and Cold Patch Mix Storage

A small cold patch mix asphalt stockpile and sand stockpile are also kept under cover in the same wooden structure as the sand/salt mixture to minimize exposure to precipitation.

Used batteries and tires are temporarily stored outside prior to disposal in separate covered containers to limit exposure to the elements.

The used motor oil storage tank is located inside a separate metal shed to prevent exposure to precipitation. The used motor oil storange tank is a double lined tank that sits inside a container, and the shed utilizes a secondary containment pallet system.

All onsite dumpsters are fitted with closable lids and sliding doors. The lids and doors are kept closed at all times to prevent moisture from entering the dumpster.

Cleaning, landscaping and maintenance chemicals are stored inside various sheds and buildings within the facility to prevent exposure to precipitation. The yard is inspected every 7-10 days by city staff. Spills or vehicle leaks are cleaned up immediately and vehicle leaks are corrected promptly or scheduled for repair with Fleet Maintenance.

There is a clearly-marked dedicated chemical storage room inside the Public Works Storage Building. Safety Data Sheet (SDS) binders are maintained in the Public Works Storage Building, the Fleet Maintenance Garage, the Public Utilities Building as well as the Public Works Administration Building for safety and compliance.

Figure 3. Chemical Storage Room

3.1.2 Good Housekeeping.

Public Works staff developed standard operating procedures (SOPs) for the Public Works/Utilities/Fleet Maintenance Facility. Facility staff maintains the SOPs document which contains instructions on various municipal facility activity protocols for good housekeeping, maintenance, and storm water pollution prevention. The SOPs document is included as Attachment F of this SWPPP.

Fleet vehicles and equipment are routinely spray washed upon returning to the yard. Cleaning is conducted at the Public Works wash rack and personnel are trained to perform the washing activities so that wash water does not drain into the stormwater drainage system. A control valve directs wash rack waste water into an oil/water separator before discharging to the sanitary sewer system. The wash rack area is placarded with instruction to open the valve for wash rack use and close the valve after use.

Prior to disposal, scrap metal and miscellaneous unusable materials are temporarily stored off the ground on pallets or racks and kept covered.

The waste oil storage tank is typically pumped out 1 to 2 times a month by Heritage-Crystal Clean LLC., depending on the levels of oil in the tank. When necessary, additional pump outs are performed. The inside of the shed housing the tank is cleaned twice a week.

The yard area is swept as needed and any debris or sediment is properly disposed.

3.1.3 Maintenance.

City vehicles and equipment are maintained at this site. The majority of vehicles at the facility are stored outside due to limited covered space. Vehicles are visually monitored daily and weekly for leaks/spills and cleaned and repaired as needed. As part of the facility's SOPs, vehicles are to be inspected by city staff each day for leaks/spills before use, and any leaks found are contained and cleaned immediately. Vehicles with leaks that cannot be rectified at the time of discovery are sent for repair work by Fleet Maintenance.

Repair and maintenance work on vehicles and equipment is done primarily inside the Fleet Maintenance Garage or the Public Works Storage Building to prevent exposure to precipitation; however there are occasions where maintenance and repair work must be done outside. Maintenance activities that must be performed outside and that involve potentially hazardous substances are confined to fair-weather days to prevent exposure to precipitation, and/or stormwater.

In addition, if work is performed outside, stormwater drainage conveyances are protected from spills using filter socks, filter bags and/or drain seals. Work is done away from the drain inlet located near the Public Works Administration Building and away from perimeter ditches as well.

The rock check dam along the perimeter fence used to filter runoff from the site is maintained by removing excessive plant growth, routinely inspected, and additional rock is added on an as-needed basis. The oil/water separators and floor drain systems associated with the wash rack are inspected routinely, and the oil/water separator is pumped out as part of its yearly maintenance by Clean Harbors Tank Cleaning.

Figure 4. Fleet Maintenance Garage (right), and Public Works Storage Building

3.1.4 Spill Prevention and Response.

All vehicles with a potential for hydraulic fluid leaks are equipped with spill kits. Additional spill kits are also posted inside the Public Works Storage Building, the Public Utilities Building and the Fleet Maintenance Garage. Operators are trained on the proper response to small spills.

Vehicles and equipment, equipment storage areas, material storage areas, and waste storage areas are checked and inspected daily for fluid leaks, uncovered containers and deteriorating labels and/or containers as part of preventative facility maintenance.

Containers that could be susceptible to spillage or leakage are clearly labeled to encourage proper handling and facilitate rapid response if spills or leaks occur.

Gasoline and diesel fuel tanks are double walled and the leak detection devices and exterior seams are inspected monthly.

The oil/water separators and their downstream discharges are monitored and inspected on a monthly basis and pumped out on a regular schedule or as needed.

The vehicle fueling pump area is uncovered and exposed. There is an emergency stop button which immediately cuts the flow of gas to the pumps. There is a fuel spill kit located directly adjacent to the pumps. All spills/leaks must be properly contained using the spill containment protocol, cleaned up and reported to the Facility Supervisor. Virginia Department of Emergency Management's 24-hour Emergency Operations Center (VaEOC) must be notified of any reportable spills as stated in the DEQ Petroleum Spill Notification Policy.

Figure 5. Fueling Station Spill Kit

Figure 6. Drop Inlet Spill Covers

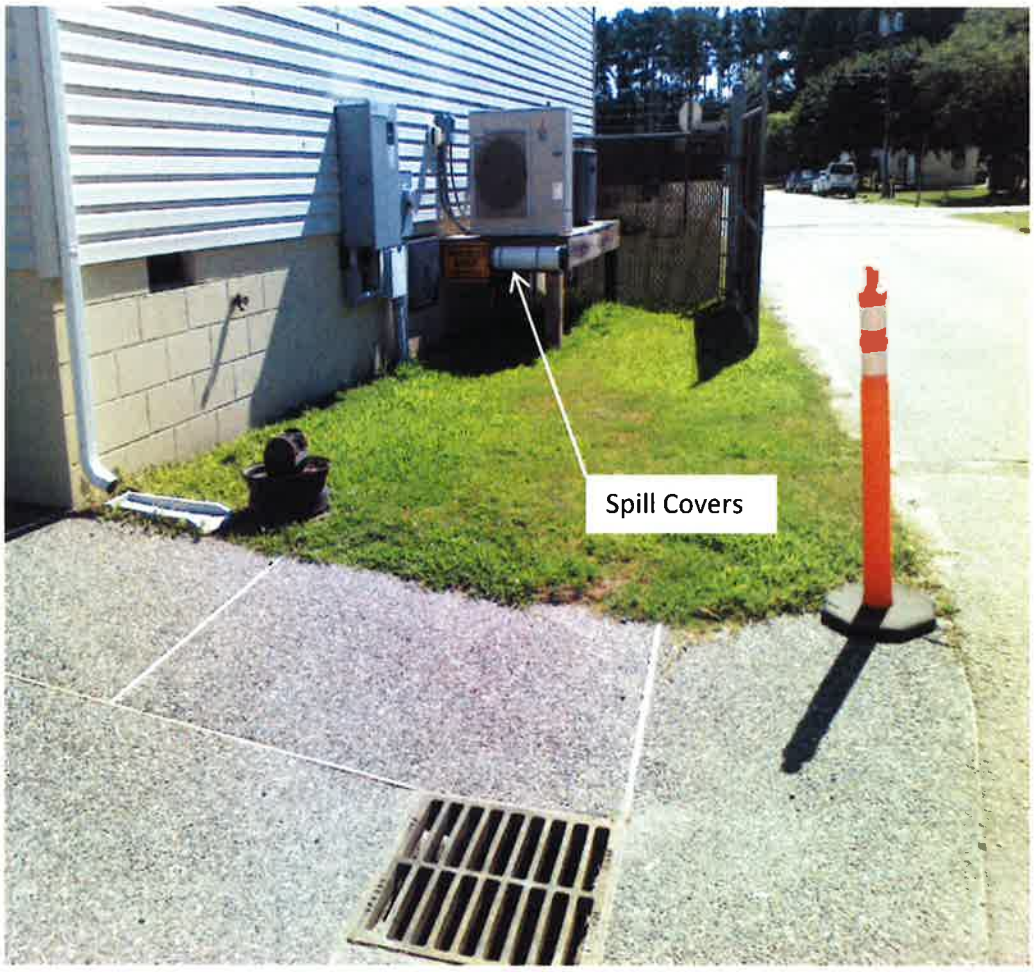


Figure 7. Drop Inlet Spill Covers

Heating oil and waste oil tanks are monitored and inspected routinely and emptied as necessary. The waste oil tank has a secondary containment perimeter since it is housed within a wood shed.

Chemicals used in landscaping, or for facility, vehicle, sports complex or roadway maintenance are stored inside various sheds and rooms throughout the maintenance facility. The chemical storage room inside the Public Works Storage Building utilizes a secondary containment rack sized to contain one hundred ten percent (110%) of the contents of the storage room.

The Poquoson Fire Department responds to and handles any spills at the facility over five (5) gallons. Public works employees handle smaller spills, and all Facility employees have participated in routine Hazmat training.

3.1.5 Erosion and Sediment Controls.

The facility's drop inlet structures use inter-drain filters and/or sock filters.

The Public Works staff installed premanufactured blocks to create a wall for push/containment of sand, crushed rock and aggregates stored at the facility. This has reduced the tracking and soil migration across the yard.

Figure 8. Premanufactured Block Containment

A rock check dam lines the facility's fence around the western half of the site. The check dam helps prevent sediment and floatables from leaving the yard and reaching the perimeter ditches, and limits concentrated flow from leaving the site thereby reducing erosion. The majority of the facility drains towards the middle of the yard and into the stormwater inlet located adjacent to the Public Works Administration Building, which drains to Outfall B as shown on the drainage map. The check dam is located along the fence to intercept stormwater runoff from the perimeter of the facility that does not drain into the stormwater inlet.

Exposed areas are stabilized by encouraging vegetative growth, and stormwater passing through the rock check dam flows through grassed areas before reaching the perimeter ditch.

The yard is swept regularly to help prevent sediment from being carried offsite by stormwater runoff.

3.1.6 Management of Runoff.

Approximately 1.34 acres, or approximately forty three percent of the facility, drains to a pipe system that begins just northwest of the Public Works Administration Building, and flows south to a yard drain at the southwest corner of the Administration building. The pipe system then drains east before discharging to a roadside ditch adjacent to Municipal Drive. This outfall is labeled "Outfall B" on the drainage map in Attachment C. The ditch from outfall B eventually drains to Floyds Bay, which is a tributary to the Poquoson River. A small part of the facility in the northeast corner also drains to Floyds Bay. Approximately 0.11 acre in this area drains towards Municipal drive as sheet flow, where a shallow paved swale drains north to a culvert under Municipal Drive. Where the paved swale leaves the facility is shown as Outfall "A" on the drainage area map.

Stormwater drains off from 1.48 acres of the facility as overland sheet flow to 3 perimeter ditches located to the north, west, and south of the facility. Stormwater flow to the perimeter ditches is fairly evenly divided between the three, with 0.55, 0.42, and 0.51 acre of the facility draining to the north, west, and south perimeter ditches respectively. These perimeter ditches eventually drain to Cedar Creek located approximately 2,000 feet downstream to the south. Cedar Creek is a tributary to the Northwest Branch of Back River. Approximately .16 acres in the southeast corner of the site drains to a small ditch and pipe system that discharges to the south perimeter ditch at Outfall "C" on the drainage map.

Overland flow leaving the site is controlled with a rock check dam against the fence on the west side of the facility. After passing through the check dam, stormwater is also filtered by grass and vegetation between the outside of the fence and the perimeter ditches.

Figure 9. Rock Check Dam Against Perimeter Fence

3.1.7 Salt Storage Piles or Piles Containing Salt.

A salt and sand mixture pile is stored under a large divided wood and vinyl storage structure approximately fifty feet in length, thirty feet in width and fifteen feet in height. Approximately seventy percent (70%) of the structure's storage capacity is dedicated to the salt and sand mixture.

The pile is contained by a check dam (berm) made of #10 fines gravel placed along the front opening of the storage structure. A four-foot high concrete blockade is used to help contain the sand and salt mixture and keep it separated from piles of sand and cold patch asphalt mix which are also stored in the structure. The sand and salt mixture pile is kept at least three feet behind the drip line of the structure eaves to minimize exposure to precipitation.

3.1.8 Non-Stormwater Discharges.

The facility does not generate non-stormwater discharges. Wash water from vehicle cleaning at the facility wash rack drains through an oil/water separator before discharging to the sanitary sewer system. Vehicle wash water is not allowed to drain to the storm sewer system. A control valve is used to direct wash water into the sanitary sewer system when the wash rack is in use, and facility staff are trained in the proper use of the wash rack.

Figure 10. Wash Rack and Oil/Water Separator Area

3.1.9 Dust Generation and Vehicle Tracking of Industrial Materials.

Sediment mobilization is minimized by keeping the pavement in areas which receive vehicular traffic in good condition. The paved surfaces are regularly swept to contain sediment, and minimize dust generation.

Vehicles that deliver stockpile materials such as crushed rock, sand or waste materials are washed in the wash rack area if needed.

3.1.10 Waste, Garbage and Floatable Debris

The discharge of waste and garbage is controlled by the facility's good housekeeping practices. Waste is disposed in roll off dumpsters within the facility. Waste and garbage collection is handled by a third party contractor, Republic Services, and is collected every Friday.

The discharge of floatable debris offsite through the storm sewer system is minimized through the use of filter socks or bags in stormwater inlets. The rock check dam along the facility fence helps minimize trash and debris from reaching the perimeter ditches by overland flow.

SECTION 4: SCHEDULES.

4.1 Schedules for Good Housekeeping/Stormwater Pollution Prevention Activities.

Daily

The following activities related to good housekeeping and stormwater pollution prevention are performed on a daily basis by staff at the Public Works/Utilities/Fleet Maintenance Facility:

- Equipment storage areas, materials storage areas, and waste storage areas are monitored and inspected for:
    - fluid leaks,
    - uncovered containers, and
    - deteriorating labels and/or containers.

  Any problems that are noted are corrected immediately.
- Vehicles and equipment are inspected for leaks prior to use. Any leaks are cleaned up immediately and rectified, If the leak cannot be fixed immediately, the vehicle is sent to the garage for repairs.

Monthly

The following activities related to good housekeeping and stormwater pollution prevention are performed on a monthly basis:

- Secondary containment systems (i.e. oil, fuel storage tanks) are inspected and emptied as necessary.
- Oil/water separators located by equipment building and at the wash rack are inspected and maintained. This includes monitoring downstream discharges from the oil/water separators for any oily discharges.
- Oil absorbent materials in floor drains and/or catch basins is inspected, and removed or replaced as appropriate.
- Floor drains and storm receiver inlets and outlets are inspected for excessive amounts of sediment, and cleaned out as necessary.
- A formal inspection is performed monthly at the facility, and an inspection report is produced. The monthly inspection report includes any incidents reported or actions taken as part of the daily/weekly visual inspections by facility staff.
- The sand/salt mixture storage and loading areas are inspected to ensure that the sand/salt mixture pile is not exposed to the weather.
- To minimize pesticide use, the facility is inspected for food, water, and harborage for pests. Pest traps are inspected and dead pests are removed and disposed of.

4.2 *Employee Training.*

Training for Public Works, Public Utilities, and Fleet Maintenance employees is required once every two years at a minimum under the City's MS4 general permit. The City is required to document training activities and submit training documentation to DEQ annually with its MS4 Annual Report by October 1st of each year. The training classes are reviewed routinely to determine effectiveness, appropriate additional topics and to ensure adequate training for all departments within the facility.

All Public Works employees are trained to identify, investigate and report illicit discharges. The drainage supervisor receives additional training on the importance of screening for, and identifying illicit discharges, and ensures his crews are properly trained.

Public Works, Public Utilities and Fleet Maintenance employees are also trained on topics which include, but are not limited to, the following:

1. Spill reporting procedures
2. Spill prevention procedures
3. Proper cleaning materials and techniques
4. Chemical and hazardous materials
5. Identifying the pathways a spill could take to enter the storm drain system
6. Best practices to prevent storm water contamination
7. Proper spill response and clean up procedures
8. Proper disposal of hazardous material and hazardous material containers
9. Identifying materials that can cause a harmful spill
10. Identifying petroleum and gasoline storage locations
11. Dry Weather Screening
12. Illicit Discharge

4.3 *Routine Facility Inspections.*

1. **Person(s) or positions of person(s) responsible for inspection.**

   Jerry Cagle, Facility Supervisor;

   Mark Boesen, Construction Inspector

2. **Schedules for conducting inspections.**

   The Poquoson Public Works/Utilities/Fleet Maintenance Facility Supervisor routinely conducts ongoing site inspections to ensure proper housekeeping, vehicle and equipment, materials, and waste petroleum maintenance. Visual inspections are conducted daily, with written reports filed on a monthly basis with the monthly facility inspection report. Any deficiencies identified during weekly visual inspections are corrected immediately.

The Facility Supervisor also conducts a formal monthly facility inspection. The monthly inspection includes an evaluation of all areas of the facility where pollutant sources are exposed to stormwater, and evaluates the vehicle storage areas, material storage areas, wash rack area, fueling area and areas where stormwater leaves the site. Facility personnel are notified of any findings or deficiencies identified during inspections. The Stormwater Pollution Prevention Plan Monthly Inspection Report can be found in Attachment C. The report and the associated checklists include various site specific concerns.

3. **Areas where industrial materials or activities are exposed to stormwater**.

   Fueling area, gasoline and diesel fuel tank

4. **Areas identified in the SWPPP and any others that are potential pollutant sources**

   Fueling area, fleet maintenance area, wash rack area, salt/sand storage, chemical storage room.

5. **Areas where spills and leaks have occurred in the past 3 years.**

   No spills or leaks have occurred in the past 3 years

6. **Inspection information for discharge points.**

   There are three outfall locations where stormwater leaves the facility and enters the City's MS4 as a point discharge. A 12-inch pipe carries stormwater east from the site where it outfalls into a v-shaped, grass lined ditch adjacent to Municipal Drive. This outfall is labelled "Outfall B" on the drainage map included as Attachment C. Approximately 1.34 acres, or forty three percent of the facility drains to Outfall B.

   The second location is just north of the fueling station, where a small concrete swale along Municipal Drive carries stormwater north away from the facility. This concrete swale collects overland flow from approximately 0.11 acres of facility property in the northeast corner. This outfall is shown as "Outfall A" on the drainage map.

   The third location is an 18" pipe that drains approximately 0.16 acres of the southeast corner of the facility, near the used battery drop off shed. The pipe discharges into the south perimeter ditch, and is shown as "Outfall C" on the drainage map.

   The remaining 1.48 acres of the site drain offsite as sheet flow to the perimeter ditches located on the north, west, and south sides of the facility. There are no outfall locations receiving point discharges from the site. The perimeter ditches are shown on the drainage map.

7. **List the control measures used to comply with the effluent limits contained in this permit.**
   No effluent limits for this facility

8. **Other site-specific inspection objectives.**

   - Posting and maintaining barriers to provide proper location of household waste drop off service for controlled debris removal.
   - Maintaining "NO DUMPING" signs.
   - Used oil facility outside Public Works Facility open to public 365 days a year; closed during yearly five (5) day event in October, overwhelming storm events and when tank is full.
   - Maintaining barriers used to prevent access to facility.

4.4 Monitoring.

There are no monitoring efforts required for this facility.

SECTION 5: DOCUMENTATION TO SUPPORT ELIGIBILITY CONSIDERATIONS UNDER OTHER FEDERAL LAWS.

5.1 Documentation Regarding Endangered Species.

There are no endangered or threatened species or critical habitat in the facility area.

5.2 Documentation Regarding Historic Properties.

There are no historic properties in the facility area.

SECTION 6: CORRECTIVE ACTIONS.

To date, no corrective actions were required for this facility.

SECTION 8: SWPPP MODIFICATIONS.

The SWPPP is a "living" document and is required to be modified and updated, as necessary, in response to corrective actions. For SWPPP modifications, a log will be kept with a description of the modification, the name of the person making it, and the date and signature of that person.

SWPPP ATTACHMENTS

Attachment A – General Location Map

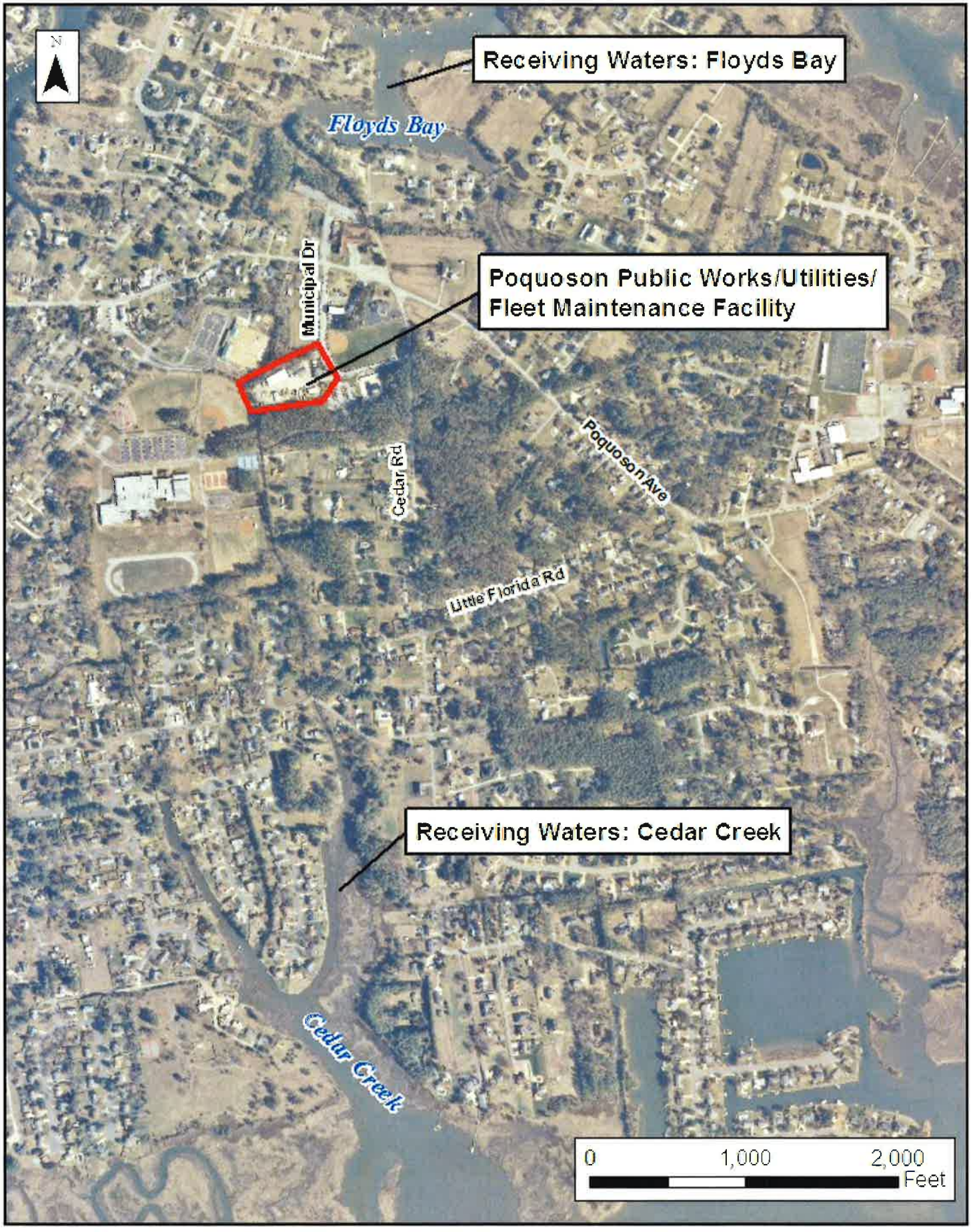
Attachment B – Site Map

Attachment C – Drainage Map

Attachment D – SWPPP Monthly Inspection Report

Attachment E – Standard Operating Procedures for Good Housekeeping and Stormwater Pollution Prevention

Attachment A – General Location Map

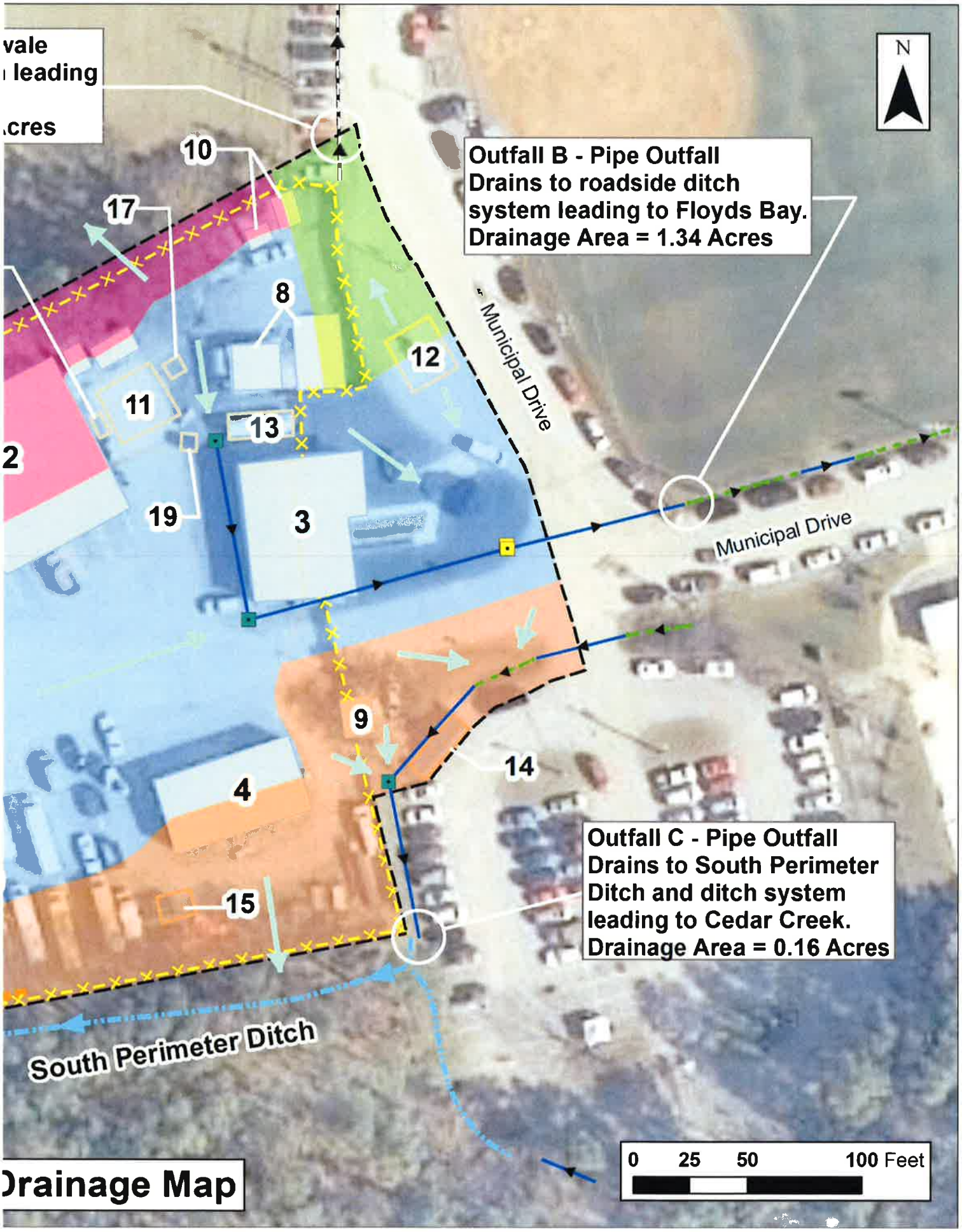


Attachment A. Public Works/Utilities/Fleet Maintenance Facility General Location Map

Attachment B – Site Map


Buildings and Significant Areas
1. Public Works Storage Building (Paint, Rust Proofers, Propane, Sweeping Compound)
2. Fleet Maintenance Building (Fuel & Oil, Vehicle Fluids, Metals)
3. Public Works Administration Building
4. Public Utilities Buidling (Metals, Paint, Chemicals)
5. Salt/Sand Mixture Storage Structure
6. Small Equipment Storage Building
7. Chemical Storage Room
8. Landscape Maintenance Storage Sheds (Fertilizers, Soil Amendments)
9. Waste Oil Tank Storage Shed (Oil & Grease, Fuel)
10. Maintenance Storage Sheds (Detergents, Bleach, Solvents)
11. Wash Rack
12. Fueling Station
13. Above Ground Diesel/Gasoline Storage Tank
14. Used Battery Drop-Off Area
15. Used Tire Storage Cage
16. Above Ground Heating Oil Storage tank
17. Oil/Water Separator
18. Oil/Water Separator
19. Dumpster (Metals, Nutrients, Trash)
20. Vehicle Storage
21. Drop Inlet Spill Covers
22. Spill Kit
North Perimeter Ditch
18
1
6
22
5
West Perimeter Ditch
Verizon Comm. Property
Legend
Facility Boundary
Fence Line
Significant Area
Stormwater Pipe
Drop Inlet
Grass Ditch
Concrete Swale
Attachmer

Attachment C – Drainage Map


vale
leading
cres
10
17
8
12
11
13
2
19
3
Municipal Drive
Municipal Drive
Outfall B - Pipe Outfall
Drains to roadside ditch
system leading to Floyds Bay.
Drainage Area = 1.34 Acres
9
14
4
15
Outfall C - Pipe Outfall
Drains to South Perimeter
Ditch and ditch system
leading to Cedar Creek.
Drainage Area = 0.16 Acres
South Perimeter Ditch
N
0 25 50 100 Feet
Drainage Map

Attachment D – Monthly Inspection Report Checklist

CITY OF POQUOSON - Department of Public Works
STORMWATER POLLUTION PREVENTION PLAN
MONTHLY INSPECTION REPORT

FACILITY NAME: City of Poquoson, Public Works/Utilities/Fleet Maintenance Facility
FACILITY ADDRESS: 12 Municipal Drive, Poquoson, VA 23662

NOTE: The facility is located on approx. 4.52 acre portion of a 15.25 acre parcel. The facility contains an equipment storage building, utilities building, fleet maintenance garages, wash bay, salt/sand storage shed, fuel/oil storage tanks and storage for construction related materials. ***(SEE ATTACHED MAP)***

CONTACTS:

NAME:	TITLE:	TELEPHONE:
Tom Jones	Director of Public Works	(757) 868-3592
Bob Speechley	Utilities Superintendent	(757) 868-3594
Jon Ellis	Fleet Maintenance Supervisor	(757) 868-3595
Jerry Cagle	Facility Supervisor	(757) 868-3590

Training:

MATERIAL	DESCRIPTION	LOCATION	QUANTITY	EXPOSED YES	EXPOSED NO	SPILLS / LEAKS YES	SPILLS / LEAKS NO
Gasoline	**Dual Walled Storage Tank (Outside)**	**Above Ground**	**4000 gals**				
Diesel Fuel	**Dual Walled Storage Tank (Outside)**	**Above Ground**	**6000 gals**				
Heating Oil	**Storage Tanks (Outside)**	**Above Ground**	**275 gals ea.**				
Other Waste Fluids	**Used Motor Oil Storage Tank (Inside)**	**Above Ground**	**385 gals**				
Used Batteries	**Various Types**	**Covered Outside Container**	**Approx. 12**				
Used Tires	**Various Types**	**Covered Outside Container**	**Approx. 120**				

Were Leak Detection Device(s) on Storage Tank(s) Visually Inspected? __ Yes __ No
Were Exterior Seam(s) on Storage Tank(s) Visually Inspected? __ Yes __ No

NOTE: If any of the above was exposed to storm water please describe below:

MATERIAL EXPOSED TO STORMWATER, LEAKS/SPILLS? __ Yes __ No Please describe below:

MATERIAL	DESCRIPTION	LOCATION	QUANTITY	EXPOSED YES	EXPOSED NO	SPILLS / LEAKS YES	SPILLS / LEAKS NO
Asphalt	Cold Patch Mix	Covered / Under Shelter	Approx. 3 tons				
Salt / Sand Material Storage	Salt / Sand Mix For Use on Roadway	Covered / Under Shelter	Approx. 150 tons				
Stone Material Storage	Processed Stone	Outside Stockpiles	Approx. 525 tons				

NOTE: If any of the above was exposed to storm water please describe below:

MATERIAL EXPOSED TO STORMWATER, LEAKS/SPILLS? _ Yes __ No Please describe below:

Description of Equipment & Vehicle with problems "Found"

EQUIPMENT STORAGE AREA	DESCRIPTION & NUMBER OF EQUIPMENT	Description of spill/leak	EXPOSED YES	EXPOSED NO	SPILLS / LEAKS YES	SPILLS / LEAKS NO
PUBLIC WORKS YARD						
PARKS MAINTENANCE YARD						

NOTE: If any of the above was exposed to storm water please describe below

EQUIPMENT EXPOSED TO STORMWATER, LEAKS/SPILLS? __ Yes __ No Please describe below:

VEHICLE STORAGE AREA	DESCRIPTION & NUMBER OF VEHICLE	Description of spill/leak	EXPOSED YES	EXPOSED NO	SPILLS / LEAKS YES	SPILLS / LEAKS NO
PUBLIC WORKS YARD						
PARKS MAINTENANCE YARD						

NOTE: If any of the above was exposed to storm water please describe below:

VEHICLE EXPOSED TO STORMWATER, LEAKS/SPILLS? _X_ Yes __ No Please describe below:

WASH RACK AREA: __ Yes __ No	**CLEAN: __ Yes __ No**	**SPILLS / STAINS: __ Yes _ No**
CHECK VALVE: __ Yes __ No	**GRATE / WASH RACK: __ Yes __ No**	
OIL /WATER SEDIMENT SEPERATOR 1: __ Yes __No *(Inspect on a monthly basis)*		
OIL /WATER SEDIMENT SEPERATOR 2: __ Yes __No *(Inspect on a monthly basis)*		
COMMENTS: *(If spills or strains are present, please describe & attach Spill / Leak Clean-up Report)*		

NOTE: Wash Rack Area is uncovered. When in operation, staff members open a valve which allows the rack to drain through an oil/sediment separator and enter the municipal sewer system. Following wash operations, the wash rack pad is rinsed off and the valve is closed .When the wash rack is not in operation, storm water runoff from the concrete pad drains through grass in to a sediment trap. The sediment trap and oil/sediment separator is inspected monthly for accumulated sediment, trash and debris and cleaned when needed. ***updated 9-23-2015**

DUMPSTERS: __ Yes __ No	**CLOSED: __ Yes __ No**	**DRAIN PLUGS: _ Yes __ No**
COMMENTS: *(If spills or leaks are present, please describe)*		

NOTE: Dumpsters are stored on hard surface, are contained and dumped by provider on a weekly basis.

FUELING AREA: __ Yes __ No	**CLEAN: __ Yes __ No**	**SPILLS / STAINS: __ Yes __ No**

COMMENTS: *(If spills or strains are present, please describe & attach Spill / Leak Clean-up Report)*

NOTE: Fueling Area is uncovered and exposed. All spills/leaks must be properly cleaned up and reported.

GENERAL FACILITY SITE AREA:

Description of Equipment & Vehicle with problems "Repaired"

EQUIPMENT STORAGE AREA	DESCRIPTION & NUMBER OF EQUIPMENT	* METHOD OF REPAIR	Work order # for repair		Repaired Yes	No
PUBLIC WORKS YARD						
PARKS MAINTENANCE YARD						

VEHICLE STORAGE AREA	DESCRIPTION & NUMBER OF VEHICLE	* METHOD OF REPAIR	Work order # for repair		Repaired Yes	No
PUBLIC WORKS YARD						
PARKS MAINTENANCE YARD						

Completed By: NAME: _____ **SIGNED:** _____ **DATE:**

(Print Name) **(Signature)**

City of Poquoson, VA

Legend

- City Boundary
- Poquoson Streets (12,000)

Poquoson Streets Back (12,000)

- Yorktown Road; PR 172; PR 171; Ridge Rd; Poquoson Ave
- Other
- Road Labels
- Parcel Boundaries
- Places

Feet

0 50 100 150 200

1:2,257 / 1"=188 Feet

Title: Poquoson public Works Coumpound SWPPP

Date: 5/11/2016

DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and City of Poquoson is not responsible for its accuracy or how current it may be.

Attachment E – Standard Operating Procedures for Good Housekeeping and Stormwater Pollution Prevention

Standard Operating Procedures for Good housekeeping & Storm Water Pollution Prevention City of Poquoson Public Works

Established June -13-2011
Revised May -27-2015

Table of Contents

Spill Prevention:

Purpose: to prevent contamination of stormwater by using proper washing techniques, proper washing locations, and proper disposal of wash water.

1. Monitor equipment storage areas, materials storage areas, and waste storage areas, checking for: fluid leaks, uncovered containers, and deteriorating labels and/or containers, and correct any problems that are noted. **Suggested frequency- bi-monthly**

2. Inspect secondary containment systems (i.e. oil, fuel storage tanks) as necessary, and empty them as necessary. **Suggested frequency- monthly**

3. Monitor oil/water separators and their downstream discharges. An oily discharge indicates that the unit is either not functioning properly or needs to be "pumped out". **Suggested frequency- monthly**

4. Install oil absorbent materials in floor drains and/or catch basins, and inspect, remove/replace as appropriate. **Suggested frequency- monthly**

5. Monitor floor drains and storm receiver inlets and outlets for excessive amounts of contaminants, and clean out as necessary. **Suggested frequency – monthly**

6. Document any/all inspection activities on the proper forms. **Suggested frequency - monthly** Ex: Storm water Pollution Prevention Plan, Dry Weather Screening/Illicit Discharge Detection Forms.

Landscaping and Lawn Care:

Purpose: to prevent contamination of stormwater by minimizing contact with fertilizer and by using innovative landscaping techniques

1. Plant vegetation that needs minimal amounts of care (i.e. water, fertilizer). **Suggested frequency – at time of initial landscaping**

2. Implement landscaping techniques that minimize water usage. **Suggested frequency – at time of initial landscaping**

3. Water just enough to supplement rainfall – use drip irrigation techniques and/or moisture sensors. **Suggested frequency - always**

4. Minimize fertilizer application, use slow release fertilizers. **Suggested frequency – always**

5. Mow with blades set high, leave grass clippings on turf areas. **Suggested frequency – always**

6. Use compost or natural (organic) fertilizers. **Suggested frequency –when avaliable**

Pest Control:

Purpose: to prevent contamination of stormwater by pesticides which can be toxic to aquatic life and may contaminate receiving waters.

1. Purchase pesticides for immediate use when possible and storing per manufacture label,. **Suggested frequency – always**

2. Adopt Integrated Pesticide Management techniques. **Suggested frequency – always**

3. Adopt alternatives to pesticides options. **Suggested frequency - always**

4. Eliminate food, water, harborage for pests by implementing routine inspections. **Suggested frequency – once/week**

5. Inspect pest traps regularly, remove and properly dispose of dead pests. **Suggested frequency – once/week**

6. Minimize pesticide application; use non toxic/lowest toxicity pesticides - **(glue boards). Suggested frequency – as warranted**

7. Do not apply pesticides immediately before/during rain events. **Suggested frequency - always**

Pet Waste Collection:

Purpose: to prevent contamination of stormwater via contact with pet related wastes

1. Check for pet waste (i.e. feces, food wastes) per inspection of parks, playgrounds etc. **Suggested frequency – 2-3x per week**

2. Remove all pet waste, and dispose of properly. Preferred method of disposal is bagged and placed in a trash receptacle. **Suggested frequency – 3x per week**

3. Wash the affected areas with a disinfectant soap and hot water, and rinse to a vegetated area.**Suggested frequency – bi-monthly or as needed**

Vehicle and Equipment Maintenance:

Purpose: to prevent contamination of stormwater by using proper maintenance techniques, proper maintenance locations, and retrofitting infrastructure.

1. Check vehicles and equipment for leaks prior to use, cleaning spills immediately, turning in to garage for repairs. **Suggested frequency – continuous**

2. Conduct maintenance work indoors – dedicate specific vehicle bays, seal floor drain systems. **Suggested frequency – at time of construction/replacement**

3. If work is performed outside, protect stormwater drainage conveyances from spills. **Suggested frequency – continuous**

4. Clean up spilled materials immediately, using dry methods (absorbents) contaminated materials to be placed in labeled containers located in Vehicle Maintenance Garage and serviced by reputable contractor for disposal as needed. **Suggested frequency– continuous**

5. Install oil/water separators where necessary. **Suggested frequency – continuous**

6. Rinse grass from lawn care equipment over permeable, vegetated areas. **Suggested frequency– continuous**

7. Never leave vehicles/equipment unattended while refueling. **Suggested frequency - continuous**

8. Document any/all inspection activities on the proper forms. **Suggested frequency - continuous**

Vehicle and Equipment Washing:

Purpose: to prevent contamination of stormwater by using proper washing techniques, proper washing locations, and proper disposal of wash water

1. Inspect oil/water separators and floor drain systems periodically to determine maintenance needs. **Suggested frequency– before and after use**
2. Designate a specific vehicle washing bay/facility – the wastewater from the floor drain should flow into an oil/water separator – the treated wastewater should flow to a municipal sanitary sewer line, if possible. If a sanitary sewer is not available, a wastewater permit must be obtained for the floor drain discharges. **Suggested frequency – continuous**

3. Close unneeded floor drains. **Suggested frequency – continuous**

4. Wash vehicles in a designated wash area only, which collects wash water and directs it either to the sanitary sewer or a vegetated area. **Suggested frequency – continuous**

5. Document any/all inspection activities on the proper forms. **Suggested frequency-monthly per SWPPP report**

Roadway Maintenance:

Purpose: to prevent contamination of stormwater as it flows over debris that is deposited on road infrastructure and bridges

1. Pave only in dry weather. **Suggested frequency – always**
2. Cover manholes and catch basins prior to paving, patching, etc. **Suggested frequency – always.**
3. Clean all fluid leaks immediately. **Suggested frequency – always**
4. Maintain roadside vegetation – restrict pesticide use. **Suggested frequency – whenever possible.**
5. Sweep/vacuum roadways and shoulders to remove debris, particulate matter. **Suggested frequency – bi-monthly, increase when needed**

Road Salt Storage and Application:

Purpose: to prevent contamination of storm water by using proper storage techniques, and improving application techniques of deicing materials.

1. Store road salt, road salt/sand mixtures in properly sized, covered structure **Suggested frequency – as needed**
2. Order/request salt delivery prior to the onset of winter weather to enable immediate storage (i.e. in salt barn, under tarp) to prevent runoff.
Suggested frequency – at time of purchase
3. Unload salt deliveries directly into barn, or move inside immediately. **Suggested frequency -each delivery**
4. Store salt on highest ground possible. **Suggested frequency – continuous**
5. Cover salt loading area or "build into" storage shed. **Suggested frequency – continuous**
6. Control spreading speeds; use a wetting agent to minimize "bounce". **Suggested frequency- as needed**
7. Control spread patterns to concentrate material where it is most effective. **Suggested frequency – continuous**
8. Inspect salt storage area, salt loading area to ensure that salt is not exposed to weather. **Suggested frequency– weekly/monthly**
9. Minimize salt usage by calibrating salt application equipment periodically. **Suggested frequency – weekly during winter months**
10. Minimize salt spillage by not exceeding capacities of equipment (i.e. front-end loader, truck bed) during loading operations. **Suggested frequency – always**
11. Always plow when de-icing roads. **Suggested frequency – weekly during winter months**
12. Reference/use Chemical Application Rate Charts. **Suggested frequency- as needed**
13. Document any/all inspection activities on the proper forms. **Suggested frequency – continuous**

Hazardous and Waste Materials Management:

Purpose: to prevent contamination of stormwater by properly storing, handling, and disposing of hazardous and waste materials.

1. Store all materials/wastes in closed, labeled containers – if outside storage is necessary, the storage area should be sheltered from the weather. **Suggested frequency – continuous**

2. Designate storage areas away from floor drains (if inside) and storm receivers (if outside**). Suggested frequency – continuous**

3. Install a pretreatment system (oil/water separator) where a potential exists for petroleum products to enter floor drains. Eliminate floor drains if possible. **Suggested frequency –at time of construction**

4. Reduce stocks of materials where viable - use "first in/first out" management techniques. **Suggested frequency – as needed**

5. Use least toxic materials. **Suggested frequency- continuous**

6. Install secondary containment devices where appropriate. **Suggested frequency– at time of construction**

7. Recycle/dispose of materials properly. **Suggested frequency – continuous**

8. Do not mix dissimilar wastes in the same containers. **Suggested frequency - continuous**

9. Document any/all inspection activities on the proper forms. **Suggested frequency – monthly**

10. Disposal of "road kill" -place in double plastic bag, and place in dumpster, via contractor to landfill and/or incinerator. **Suggested frequency – as needed**

Operational By Products/Wastes

Purpose: to prevent contamination of stormwater by preventing "illegal" disposal, and by properly storing, handling, and disposing of facility generated and wastes.

FACILITY GENERATED WASTES:

1. Develop a list of wastes, with associated procedures for handling/storage/recycling/disposal, and provide to staff. Instruct all staff to adhere to this information, and to inform the facility manager if new wastes are generated. **Suggested frequency – as needed**

2. Secure the facility to prevent access (fence/lock gates) .**Suggested frequency – at close of business**

MUNICIPAL AREAS THAT ARE SUSCEPTIBLE TO ILLEGAL DUMPING:

1. Post/maintain "NO DUMPING" signs, erect barriers to prevent access, illuminate area. **Suggested frequency – as needed**
2. Patrol areas. **Suggested frequency – as needed**
3. Maintain areas/remove illegally dumped trash/debris. **Suggested frequency – as needed**
4. Document any/all inspection activities on the proper forms **Suggested frequency - continuous**

DROP OFF SERVICE: SATELLITE LOCATION FOR CONTROLLED DEBRIS REMOVAL:

1. Post/maintain "signs", erect barriers to provide proper location of site. **Suggested frequency - during hours of operation**

2. Maintain and clean area used pre & post use. **Suggested frequency - during hours of operation**

3. Remove debris and take to controlled off-site. **Suggested frequency - during hours of operation**

4. Spill kits on site with vehicles in case of spill. **Suggested frequency – as needed**